



Questions & Answers: Champaign, Illinois, Manufactured Gas Plant Site Project Update Fact Sheet – December 2008

The Ameren Illinois Utilities have completed an investigation into the environmental conditions at and around the location of its former manufactured gas plant (MGP) at 308 N. Fifth Street, Champaign. PSC, an environmental engineering firm under contract to Ameren, performed the work along the boundaries of our property and on nearby properties. The Illinois Environmental Protection Agency (Illinois EPA) and the U. S. EPA reviewed and approved the work plan for the sample collection, which was designed to provide more information about impacts to the environment from historical gas production operations. The results of this latest phase of the study confirmed previous findings that gas production byproducts, which are primarily coal tar, remain beneath the ground surface. These findings indicate additional cleanup will be needed at the site.

While the byproducts contain chemicals that may pose a health risk if people come into direct contact with them over a long period of time, the previous investigations and the 2008 investigation results raised no concerns that people have been exposed to MGP impacts now or in the past. The impacted areas are limited and the highest levels of impact are more than 10 feet below ground. The Ameren Illinois Utilities are working with the Illinois EPA to address the impacts that were found on and off of the former manufactured gas plant property.

This fact sheet updates the August 2008 fact sheet.

Q: What is the history of the Champaign manufactured gas plant property?

A: Predecessor companies of the Ameren Illinois Utilities produced gas from coal and oil on the property. The manufactured gas was stored in large, cylindrical above-ground holders before distribution to the community. Between the 1930s and early 1950s, the plant was used only occasionally to supplement natural gas. Most of the plant structures were removed from the property in the late 1950s, except for the booster house. An American Legion post used this building between 1979 and 1991, when Illinois Power, a company that became part of the Ameren Illinois Utilities in 2004, reacquired the property.

Q: What residues were created during the gas manufacturing process?

A: As with many industrial processes, gas manufacturing produced residues. Coal tars, coke, and ash were the primary residues of the gas manufacturing process. Both the

coal tars and coke were valuable byproducts. Coke was the remaining portion of the coal after the process used to manufacture gas was complete. Byproduct coke was used as a heating fuel at the manufactured gas plant and was sold to others. Coal tars also served as a fuel for heating the plant and had market value. The tars were sold to the chemical industry for the manufacture of dyes, explosives, medicines, and perfumes and for use in creosote (wood preservative) and road tar. Today, coal tars are found in soaps and shampoos for dry skin and scalp, driveway sealers and a variety of dyes, drugs and paints.

Q: What are coal tars?

A: Coal tars are thick, black, brown or red-brown opaque liquids or solid materials produced during the gas production process. Coal tars contain a number of chemically distinct compounds. Polycyclic aromatic hydrocarbon compounds, or PAHs, are one class of chemicals in coal tars. PAHs are produced in combustion processes, such as burning coal, oil and wood and, therefore, are widespread in the environment. Today, PAHs are found in many roofing materials, wood preservatives, asphalt paving and pavement sealers. Another class of chemicals found in coal tar is known as volatile organic compounds (VOCs). They evaporate easily into the open air, but could exist for a long time underground. Some of these volatile chemicals are found in gasoline and in many petroleum-based consumer products.

Q: Is there anything in the residues to make them harmful?

A: There are many different chemical compounds in gas plant residues. Some compounds in coal tars, coke and ash may produce health problems, ranging from minor to more serious. For example, some PAHs can irritate the skin and nose and throat, and high levels of or prolonged exposure to VOCs can cause nausea and headaches. Scientists have determined that frequent or daily exposure in a work setting to some PAHs and VOCs can pose an increased risk of cancer.

Q: What work has been performed as part of the environmental project?

A: Environmental engineering firms under contract to the Ameren Illinois Utilities and Illinois Power investigated soil and groundwater conditions in several phases at the property and in areas on all four sides of our property. Studies were performed in 1986, 1990, 1992 and 1997.

Tarry residues were found underground in the vicinity of old plant structures, and laboratory analyses of soil and groundwater samples detected chemical compounds typically found at former manufactured gas plant sites.

In the winter of 1997-98, Illinois Power removed tar and other materials that were a major source of the soil and groundwater impact. Philip Environmental Services Corp., under contract to Illinois Power, performed the work in accordance with an Illinois EPA-approved work plan and an air monitoring program. The contractor excavated tar and other residual material from structures that remained below the property, backfilled the areas and restored the surface with gravel, topsoil and grass.

In order to meet Illinois EPA's revised cleanup requirements, in summer 2004, the contractor returned to the site to further investigate the northern portion of the manufactured gas plant site and adjacent property to the north and east. Workers used boring equipment to collect soil samples and a backhoe to excavate areas where former gas manufacturing structures had been located. As with previous investigations, the air was monitored for vapors and dust whenever this work was being performed to protect the workers and neighborhood residents.

Workers returned to the site in spring 2008 to install more groundwater monitoring wells and collect additional soil and groundwater samples in response to the state and federal EPAs' comments on the Comprehensive Site Investigation Report of the 2004 work. The sampling was conducted under a work plan approved by the Illinois EPA and USEPA.

Q: What are the major findings of the 2008 Comprehensive Site Investigation Report?

A: Major conclusions of the report are:

- There are impacts to soil on the Ameren Illinois Utilities property from historic manufactured gas operations that will require cleanup (remedial) work.
- There are impacts to soil offsite to the north, northwest and south that are unrelated to manufactured gas operations.
- The manufactured gas-related impacts to soil offsite to the north and northwest are at least three feet below the ground surface.
- The impact to the west of the property is in the 5th Street right-of-way and does not pose a risk for long term exposure.
- Groundwater has been impacted; however, no one uses this groundwater.
- Ameren's cleanup will address the manufactured gas impacts to soil and groundwater.

Q: The Ameren Illinois Utilities have not identified any immediate exposure concerns from soil or groundwater data, but what about the possibility that vapors could enter nearby basements or crawlspaces?

A: After review of the off-site investigation results, the Ameren Illinois Utilities selected three residential properties to evaluate the potential for indoor inhalation through basements or crawlspaces. The three residences were in the closest proximity to soil or groundwater impact beneath the surface of the soil. When evaluating the potential for vapors to enter a structure through the subsurface, both Illinois EPA and U.S. EPA guidance recommend collection of soil gas samples. A probe is inserted into the soil outside the structure and specialized equipment is used to collect a sample of the air that is in the soil between soil particles. This provides a better measure of the risk of exposure than indoor air sampling because indoor air already contains chemicals that would interfere with the assessment. These chemicals can include cigarette smoke, cooking odors, household cleaning chemicals, gasoline fumes from attached garages, etc. Though the Illinois EPA does not presently require such sampling, the Ameren

Illinois Utilities voluntarily collected soil gas samples from locations around these residences. None of the sample results indicated impacts that would present a health concern to residents. Any impacts detected were well within the limits that are considered to be safe by the Illinois EPA. The Ameren Illinois Utilities have provided these results to the property owners and to the occupants of these properties. A report detailing our recent soil gas sampling activities and results will be submitted to the Illinois EPA. The report will also be placed in the Ameren Illinois Utilities' local and electronic information repositories.

Q: What are the next steps in the Champaign MGP site environmental project?

A: The Ameren Illinois Utilities will submit its draft Remedial Objectives Report and Remedial Action Plan to address the cleanup of impacts on the Ameren property. Copies of these documents will also be placed in the Ameren Illinois Utilities' local and electronic information repositories for access by the public. Shortly after the Illinois EPA completes its review of the documents, the Ameren Illinois Utilities will host another open house in Champaign for residents to learn about the plans and to ask questions. We anticipate this open house will be held in January 2009.

In preparation for the cleanup of the Ameren Illinois Utilities property, the existing building will be demolished before the end of the month. The demolition will begin on December 15, 2008 and should be completed by the end of the week. As required by state and local regulations, the building has been inspected and tested for asbestos prior to demolition. No asbestos was found in the building.

Some MGP impacts are present at a few off-site properties and below city streets. The Ameren Illinois Utilities' investigation data have shown that there is no concern about immediate exposure. The Ameren Illinois Utilities will be working with property owners and tenants on whose property impacts were found. Potential responses to these impacts include treatment of impacts below the surface to chemically destroy them; the use of engineered barriers to contain the impacts and establishment of control restrictions, such as a highway authority agreement to ensure that impacts beneath public streets are not disturbed.

Q: When will the cleanup begin?

The cleanup of the Ameren property will begin in early 2009. The exact date of the cleanup depends on the completion of the Illinois EPA's review and approval of our Remedial Objectives Report and Remedial Action Plan. Off-site cleanups will occur after the start of the cleanup of the Ameren Illinois Utilities property.

Q: How long will the cleanup take?

The cleanup of the Ameren Illinois Utilities property will take approximately one year. After the completion of the cleanup, the Illinois EPA may require up to a year of monitoring at the site before issuing a No Further Remediation Letter, signifying that the cleanup is satisfactory. Impacts at off-site properties will be addressed as quickly as possible after Ameren and the property owners reach the necessary agreements.

Q: How may people in the community ask questions and offer opinions about this project?

A: The Ameren Illinois Utilities are committed to open communication with those interested in the project. We will provide more information about the cleanup procedures and schedule before work begins in 2009. We have placed a collection of documents associated with the project in a **Site Information Repository** located at the Douglass Branch of the Champaign Public Library at 504 E. Grove Street. The telephone number of the library is 217-403-2090. Library hours are Monday – Thursday 10:00 a.m. until 8:00 p.m., Friday 10:00 a.m. until 6:00 p.m., Saturday 10:00 a.m. until 4:00 p.m.

Documents have also been placed at the Champaign City Building, located at 102 N. Neil Street, which is open from 8:00 a.m. to 5:00 p.m. on weekdays, unless otherwise posted. The report and fact sheets may be reviewed at the Information Desk located in the Atrium Lobby. If you have questions or the desk is temporarily un-staffed you may inquire at the Neighborhood Service Department in the same building or call 217-403-7070.

Information about the project can also be found on Ameren's Web site at http://www.ameren.com/Environment/ADC_ChampaignMPGRemediationProject.asp.

Additional inquiries about the project can be made by calling Mr. Leigh Morris with the Ameren Illinois Utilities at 217-535-5228 or by e-mail at lmorris@ameren.com. His mailing address is Public Relations, Ameren Illinois Utilities, 200 W. Washington St., Springfield IL 62701.

Inquires regarding Illinois EPA's oversight of this project can be made by contacting Stan Black at 217-785-1427 or by e-mail at stan.black@illinois.gov His mailing address is Office of Community Relations, Illinois Environmental Protection Agency, PO Box 19276, Springfield, IL 62794-9276.

The city of Champaign has cooperated with the investigation and has provided oversight for the project in addition to the Illinois EPA. Champaign City Council District 1 Representative Gina Jackson has offered to assist neighboring residents who wish to obtain more information about the project. Those who wish to discuss the project with Ms. Jackson may contact her at 217-352-3199.